

## ***Network Expansion Project***

Progress Report

October 1, 2008

The Network Expansion project is moving from Planning into the Execution phase. A contract has been awarded to Bresnan Communications to provide Statewide Transport Services throughout the state. ITSD is also exploring the opportunity to sign a second contract with Qwest Communications to provide network services in locations where Bresnan is not the service provider; they offer services that better meet the user's needs or the cost of service is significantly less.

Bresnan Communication's solution includes a 2.5 Gigabit fiber backbone with connection points in Missoula, Helena, Bozeman and Billings. Bresnan's solution also includes a 1 Gigabit fiber route that is physically diverse from the primary route to support high availability requirements. Bresnan's 2.5 Gigabit route is scheduled to be installed, tested and placed into service by September 21, 2008. In the test phase, it was determined that applications using large packet sizes were unable to connect to or retain their connection through the network. This issue has been resolved, additional testing completed with several of the failed applications, and our intent is to migrate back to the Bresnan MPLS network the week of October 6<sup>th</sup>.

The Bresnan solution also includes aggregation points in 15 communities throughout the state. Aggregation points include Dillon, Lewistown, Miles City, Glendive, Glasgow, Fort Benton, Cut Bank, Polson, Kalispell, Hamilton, Butte, Great Falls, Libby, Havre, and Forsyth. Bresnan is in the process of ordering building these sites out and expects to have them completed in September/October time frame. The One exception is Libby, where they will have to construct a fiber or microwave route between Libby and Kalispell. Bresnan will be turning up their aggregation sites starting the week of October 13<sup>th</sup>.

Circuit orders have been issued for 80 sites throughout the state that currently support both data and video services. Bresnan has conducted initial site visits to most sites and is in the process of building out their cable infrastructure or ordering services from other service providers to connect these sites to the backbone. Bresnan is in the process of conducting site visits to verify power availability, equipment locations and circuit termination points. A meeting is scheduled for October 9<sup>th</sup> to set preliminary cut dates for each site.

In the meantime, there has been a significant amount of tasks completed supporting the Network Expansion project. Fiber upgrades on the Capitol Complex have been completed, new management tools have been installed that will give us better visibility into the health of the network, and a new DMZ (security zone) has been established to separate state and non-state traffic. A new Internet Portal has also been established in Billings. This will allow us to automate failover and load balancing between the Helena and Billings Internet Portal when the Bresnan Backbone Service is fully operational later this month.